# A Framework for Tomorrow

**In the world of human endeavor, the International Space Station breaks new ground. With its first elements put in place late in 1998, the International Space Station will afford scientists, engineers, and entrepreneurs an unprecedented platform on which to perform complex, long-duration, and replicable experiments in the unique environment of space.**

The International Space Station is the largest and most complex scientific cooperative project in history. Led by the United States, it draws upon the scientific and technological resources of 16 nations. When completed, the International Space Station will have a mass of about 1 million pounds. It will measure about 360 feet across and 290 feet in length and will have an internal volume roughly equal to the passenger volume of a 747 jumbo jet. Six laboratories will provide more space for research than any other spacecraft ever built.

More than 40 space flights during 5 years and at least three launch vehicles — the Space Shuttle, the Russian Soyuz rocket, and the Russian Proton rocket — will deliver the International Space Station components to orbit. Assembly of the more than 100 components will require a combination of human spacewalks and robotic devices.

As the new century began, the first stages of construction had been completed and a 7-story, 76-foot-long, 35-ton Space Station orbited the Earth. The first component of the Station was the Control Module *Zarya,* Russian for "Sunrise," which was built in Russia under contract to the U.S. This unpiloted "space tugboat" was launched by the Russian Proton rocket in November 1998. The following month, a Shuttle crew attached the second Station component, *Unity,* to *Zarya*.

Primary oversight for all flight control, training, planning, and construction of the International Space Station is at the Johnson Space Center. Monitoring Station operations is a continuous job for Station flight controllers in the Flight Control Room in the Mission Control Center. They coordinate with JSC flight controllers in Russia and with the flight control centers of our international partners.


**The Mission Evaluation Room for the International Space Station is now operating 24 hours a day, 7 days a week. Twelve managers oversee the day-to-day activities of the International Space Station mission. During assembly operations, three managers are on console around the clock and a team of 300 engineers are on call.**

**Mission Control**
JSC is the operations center controlling on-orbit Shuttle and International Space Station missions. The Control Center's flexible configuration allows the flight control team to simultaneously command multiple spacecraft.